

ABSTRACT

The present invention relates to a method, apparatus, and system to optimize frequently executed code and to use compiler transformation and hardware support to handle infrequently executed code. The method includes
5 compiling a computer program. The method further includes improving performance of the computer program by optimizing frequently executed code and using compiler transformation to handle infrequently executed code with hardware support. The method also includes storing temporarily the results of produced during execution of a region to improve performance of the computer
10 program. The method additionally includes committing the results produced when the execution of the region is completed successfully.